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REMARKS

Claims 1-24 are now pending in the application. Claims 1, 17 and 19, the only independent claims, have been amended herein. Dependent Claims 21-24 have been added.

Drawings

Paragraph 1 of the Action correctly noted that Figures 1-3 should be designated as -- Prior Art --. Corrected drawings providing such labeling are attached hereto. Approval of same is respectfully requested. Formal drawings shall be submitted when the application is in condition for allowance.

35 USC 103(a) rejection

Claims 1-20 were rejected under 35 USC 103(a) as being unpatentable over US Patent 4,682,862 (Moskovich) in view of US Patent 5,144,417 (Tsukagoshi et al). In view of the foregoing claim amendments and the following discussion, this rejection is respectfully traversed and reconsideration is requested.

Independent Claim 1, as amended herein, is directed to a projecting image display device including at least three image projecting sources for projecting images in a different color of light, a viewing screen on which the images are projected, at least three lens assemblies each disposed in an optical path between one of the image projecting sources and the viewing screen, each of the lens assemblies including a plurality of lens elements, and a shading element affixed to *only a portion of* at least one of the lens elements, wherein the shading element has a shape and orientation on the lens element that causes an increase in color uniformity across the viewing screen.

Independent Claim 17 is directed to a method of displaying an image on a viewing screen of an image display device, the method generating an image in at least three colors of light, and projecting the image in each of the three colors of light onto the viewing screen with a lens assembly having affixed, *only to a portion thereof*, a shading element that *has a shape and orientation so as to* cause an increase in color uniformity across the viewing screen.

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Finally, independent Claim 19, as amended herein, is directed to a method of forming a lens assembly for use in an image display device including providing at least one lens element that receives an image in a single color of light from a cathode ray tube and projects the image onto a viewing screen of the image display device, and *affixing, to only a portion of the lens element, a shading element that has a shape and orientation so as to cause an increase in uniformity of the single color across the viewing screen.*

The Office Action takes the position that Moskovich discloses “a projection lens which is adapted to project an image from a CRT and consists of three lenses...[but] does not explicitly recite the use of at least 3 image sources” and “also does not explicitly recite a shading element affixed to one of the lens elements” (emphasis added).

The Action then states that the “examiner relies on Tsukagoshi which discloses a CRT system (Fig 1, 2) where a set of lenses is utilized to reproduce each of the colors (red, green and blue)” and further states that “Tsukagoshi also discloses a system which increases the color reproduction of the lens by coloring/dyeing or soaking the lens”.

The Action concludes that it “would have been obvious...to modify Moskovich which discloses a three lens system to projection an image from a CRT to a screen, by increasing the color reproduction of the lens as performed by Tsukagoshi by coloring/dyeing or soaking the lens”.

First, Applicants note that Moskovich is directed to a projection lens system for projecting a monochromatic CRT onto a larger screen. Applicants fully agree with the statement in the Action that Moskovich does not teach or even suggest the use of three image sources or the implementation of a shading element affixed to one of the lens elements.

Tsukagoshi is simply directed to an apparatus, using “a green cathode ray tube” that uses two color selecting means – the first having “a high refractive index to light having a wavelength of 570 nm or more and formed over the surface of a foremost glass lens of a series of projection lenses” (col. 4, lines 36-40; see also Fig. 1(a), layers 8 and 22); and a second having a coating layer with “a high reflection factor or a high absorption factor to light having a wavelength of around 520 nm” (col. 4, lines 43-49).

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Tsukagoshi is specifically focused on overcoming the drawbacks of the multilayered interference filter 5 (Fig. 5) to improve the color purity of the green cathode ray tube, by using two filters, or 'color selecting devices' to *filter light having undesired wavelengths*. Tsukagoshi does *not* teach or suggest a display device that includes a shading element, affixed to one of the lens elements, wherein the shading element has a *shape* and *orientation* on the lens element that causes an increase in color uniformity across the viewing screen.

For at least the foregoing reason, Applicants respectfully submit that each of independent Claims 1, 17 and 19, as filed, are patentable over Moskovich and Tsukagoshi.

In addition, Applicants submit that there is absolutely no teaching or suggestion, nor would one skilled in the art have any motivation, to combine and modify the teachings of Moskovich and Tsukagoshi in the manner proposed in the Action. It is, of course, improper to pick and choose elements from several references in order to "build" an obviousness rejection, when such a combination would not in fact have been obvious to one of ordinary skill in the art. Further, it is impermissible to use an Applicants' specification as an instruction manual or "road map" to piece together the teachings of the prior art in order to render claims obvious. The *only* suggestion for combining the alleged teachings of Moskovich and Tsukagoshi in the manner suggested in the Office Action is found in the luxury of the hindsight accorded one who first viewed Applicants' disclosure, which of course, is not a proper basis for a rejection.

However, in order to advance the application and to even further distinguish over the art of record, each of the independent claims has been amended herein to recite that the shading element is affixed *only to a portion of at least one of the lens elements*, and in a *shape and orientation on the lens element that causes an increase in color uniformity across the viewing screen*. Applicants respectfully submit that neither Moskovich nor Tsukagoshi teach or even remotely suggest a display device that includes such an element.

For all of the foregoing reasons, each of independent Claims 1, 17 and 19, as amended herein, is believed clearly patentable over any permissible combination of the teachings of Moskovich and Tsukagoshi. Reconsideration is requested.

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With regard to dependent Claims 2-4, 7 and 18, the Action further notes that the “nominal features” (of opaque, grayscale translucent, color translucent or adhesive fixing) are “conventionally used and widely available to a designer/user whom wishes to implement these desired choices into a particular design/system” and that “thus the Examiner takes ‘OFFICIAL NOTICE’ regarding such elements”.

In response, Applicants respectfully submit that it is not conventionally known to use these claimed features within the context of the amended claims – and specifically, as to a display device or method as recited herein, in which a shading element is affixed to only ‘a portion’ of at least one of the lens elements - such that the shape and orientation thereof causes an increase in color uniformity across the viewing screen.

In addition, with regard to dependent Claims 14-17, the Action further notes that the “nominal features of alignment of the lens” is “notoriously well known in order to provide an accurate reproduction of image data onto a screen” and that “thus the Examiner takes ‘OFFICIAL NOTICE’ regarding such alignment”.

Again, in response to this assertion, Applicants traverse the assertion and submit that it would *not* be obvious to “modify Moskovich and Tsukagoshi....by aligning each lens in the system as done conventionally in order to accurately reproduce the input image data for viewing”. As described in Applicants’ specification as filed at least at paragraphs [0038] and [0040], *because the shading elements are applied directly to the lens element*, and because *customized shading patterns may be used*, it will “generally be necessary to properly align the lens element about its optical axis” - - neither Moskovich nor Tsukagoshi would necessarily require or anticipate the need for such accurate alignment, as neither Moskovich nor Tsukagoshi include shading elements affixed to a lens element in a specific shape and orientation so as to increase color uniformity (in fact, as acknowledged in the Action, Moskovich does not even suggest the use of a shading element; and Tsukagoshi describes only a “color selecting device” having an “interference coating layer formed over a lens” (col. 3, lines 34-35)). One of ordinary skill in the art would therefore have absolutely no motivation to turn to any allegedly known alignment system to incorporate such alignment into any system based on the combined teachings of Moskovich and Tsukagoshi.

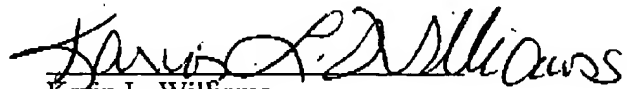
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For at least the foregoing reasons, each of independent Claims 1, 17 and 19, as amended herein, is believed patentable over the teachings of Moskovich and Tsukagoshi, and prompt and favorable reconsideration are respectfully requested.

Dependent Claims 2-16, 18 and 20-24 are believed to be clearly patentable over the art of record for at least the same reasons as indicated above with respect to Claim 1 or Claim 19, one or the other from which they depend, and are believed to even further define over the cited references by reciting additional distinguishing limitations.

Should the Examiner be of the view that an interview would expedite consideration of this Amendment or of the application at large, request is made that the Examiner telephone the Applicant's attorney at (908) 518-7700 in order that any outstanding issues be resolved.

Respectfully submitted,


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